

ATC West, Inc., James G. Neighbor, President  
10405 W. 52nd Terrace, Shawnee, Kansas 66203  
913-268-9051

January 7, 1986

[Redacted]  
[Redacted] on [Redacted]  
[Redacted]

Boulder, Colorado 80307

Dear [Redacted]:

Attached is a copy of the various options available for the 810. There really hasn't been too much additional except for O.P.E.S., which should be done and priced very soon.

The list of E Proms is quite lengthy, so here goes:  
Phoenix; Tucson; Las Vegas; Albuquerque; Alaska-major airports;  
Calgary, Canada; Chicago/South (JOT); Chicago/North (MKE);  
Cincinnati; Cleveland; Dallas; Denver; London; Houston; Boise;  
Los Angeles; Kansas City; Bogata; New York; Owensboro, Ky.; Milan;  
Fome; St. Louis (IRK); San Diego; Sidney, Aus; Wichita; San  
Francisco; Winnepeg; Vancouver; Toronto, Canada. Price is  
\$520.00 with delivery time approximately three weeks.

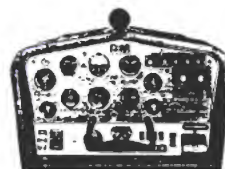
Nothing more on the Visual. A final determination  
on optics presentation is required and then pricing will  
be available with product about three months later.

Let me know if I can be of assistance. Please not our  
new address for your records: 10405 W. 52nd Terr..

Sincerely,

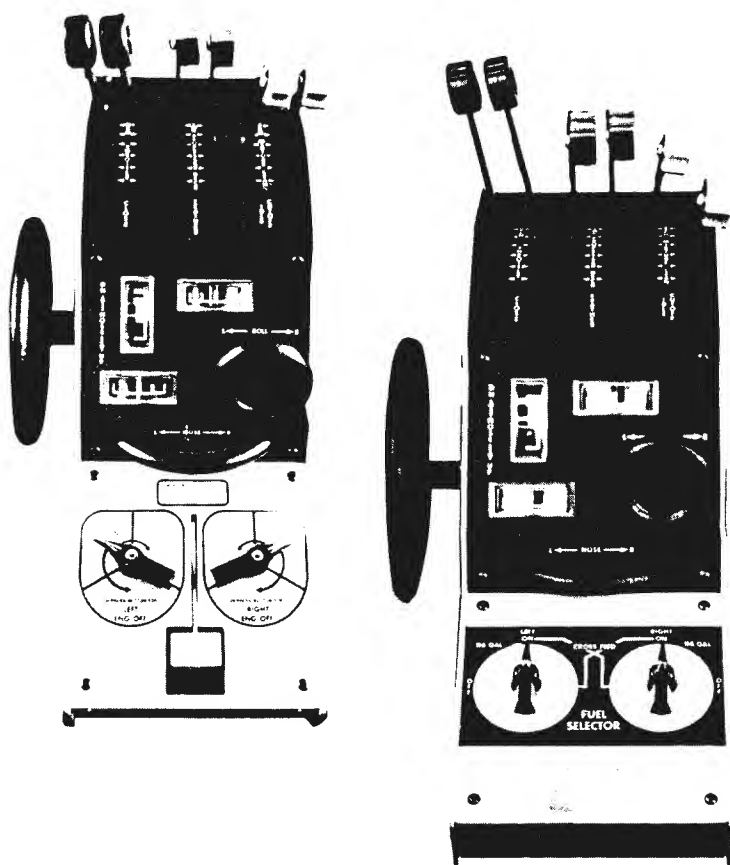
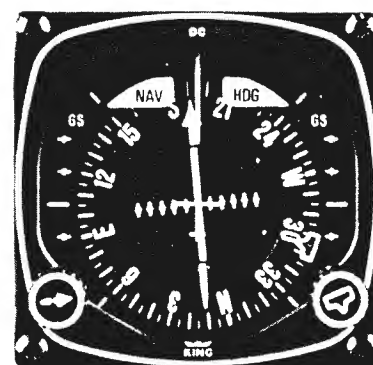
James G. Neighbor  
President  
ATC West, Inc.

*I have several used XY Plotters - \$1695 - 90 day  
Warranty, Pens & Charts.*



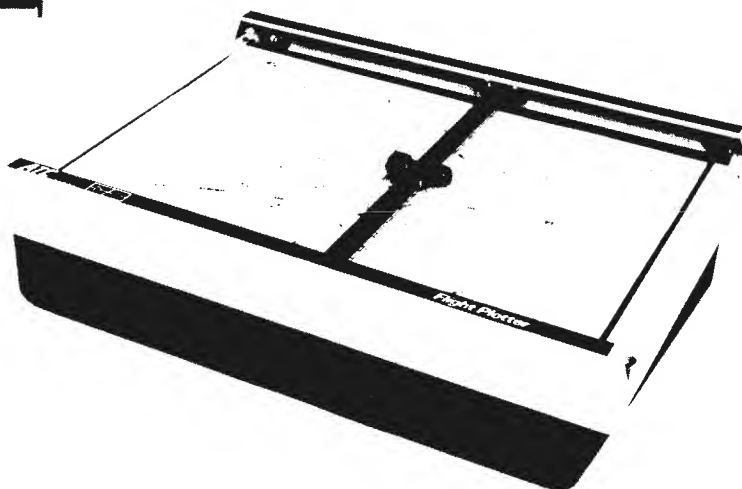
# OPTIONS

**HORIZONTAL SITUATION INDICATOR (HSI) —**  
This option is a King HSI which replaces the standard Heading Indicator and the #1 ILS/VOR Head of the ATC-810. It duplicates the functions of an HSI system, providing continually slaved gyro magnetic heading, VOR, LOC and GS information in a single display. Raw data information is still available from the 810's #2 Nav. radio and can be used to operate the #2 ILS/VOR Head.



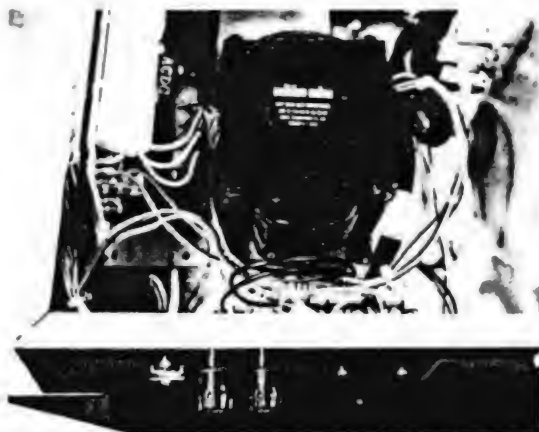
**TWO-TANK FUEL SELECTOR PANEL —** A four-tank fuel selector panel is standard with the ATC-810. This option simulates the fuel selector panels of different turbo-charged twins having two-tank fuel systems. With simple adjustments to manifold pressure, RPM and fuel flow, pilots can work with "their own numbers." The ATC-810 can be easily matched to the power setting of a specific aircraft.

**X-Y FLIGHT PLOTTER —** Provides a ground track of the course "flown" by the pilot on the ATC-810 and can be switched to the scale desired. Provides a permanent chart of the 810 pilot's performance which is used by the instructor in reviewing performance with the pilot. A variable scale is available which gives additional flexibility for use of the plotter with different navigation charts.



PART NO. 570-22-0  
REV NO. 1C  
ADRS NO. D. 8. 01 23

**SPECIAL AREA PROM** — Special ATC-810 customer-designated navigational area. Provides a 150 x 150 NM specific navigational area which exactly duplicates the actual instrument environment, using actual frequencies and navigational positions for nav-aids in the designated area. This optional feature enables the ATC-810 pilot to train in the precise route structure in which he normally flies. This option is in addition to the standard New York-Philadelphia area PROM.



**220V 50Hz CONVERSION** — This option converts the ATC-810 from 115V 60Hz to 220V 50Hz operation.



**810 SERVICE POLICY** — One year service policy for the ATC-810, includes parts and labor. An excellent way to protect your investment.



**MILLIBAR SCALE ON ALTIMETER BARO-SET** — Enables the pilot to adjust the ATC-810 altimeter baro-set to metric values of barometric pressure. A desirable feature in areas using the metric system.



**FUEL FLOW GAUGE** — ATC-810 concentric fuel flow indicator. Monitors fuel flow as demanded by the throttle and mixture lever positions. Used by pilot to adjust fuel flow for proper engine performance.



**ILS/VOR HEAD** — Replaces standard #2 VOR head on HSI-equipped 810's. This option provides pilot with back-up navigational capability for ILS approaches, if the HSI is inoperative or blocked.

# ATC<sup>®</sup> Option Bulletin #1

## Pilot Settable Altimeter

This altimeter enables pilot selection of specific altitudes based on barometric settings. The combination of this option with the 810's standard altimeter provides a dual altimeter system that flight schools can use to train European contract student pilots who must fly both by field elevation (Qfe) and barometric settings (Qnh).

### HOW IT WORKS

This altimeter can display either the barometric pressure altitude or a field elevation altitude. During an approach to landing, the Qfe set altimeter displays altitudes based on field elevation while the Qnh set altimeter will display the barometric pressure altitude. On final approach the pilot monitors the Qfe set altimeter as his primary altimeter until touchdown at which time it reads zero altitude.

This option can be installed on the new ATC-810's or retrofitted by ATC distributors on any 810's already in use.



# ATC® Option Bulletin #2

## "Light Twin" Control Force Feel/Electric Trim Option

This option allows the ATC-810 to simulate the feel of a light twin as well as a heavier cabin class twin engine aircraft. This effectively provides flight schools with the flexibility to train student pilots for their initial multi-engine rating in a realistic cockpit environment, and keep professional pilots proficient in emergency procedures.

Included in this option is electric elevator trim which lets the pilot trim out any pressures on the yoke when changing pitch altitude. In the interest of safety, the electric trim also frees up the pilot's hand during critical flight phases such as takeoffs and landings. The trim switch is mounted on the left side of the yoke as it is in twin engine aircraft.

Potential customers include:

- Flight schools that teach primary multi-engine students and instrument students.
- All colleges and universities that have ab initio pilot training.
- Independent airmanship courses that teach recurrent multi-engine training to pilots using a wide range of twin engine aircraft.

This option enables multi-engine training on the ATC-810 in either a Navajo type aircraft or Seneca Seminole type aircraft. It can be factory-installed or field-retrofitted on any 810.





# ATC<sup>®</sup> Option Bulletin # 3

## X-Y Variable Scale Flight Plotter Enhancement

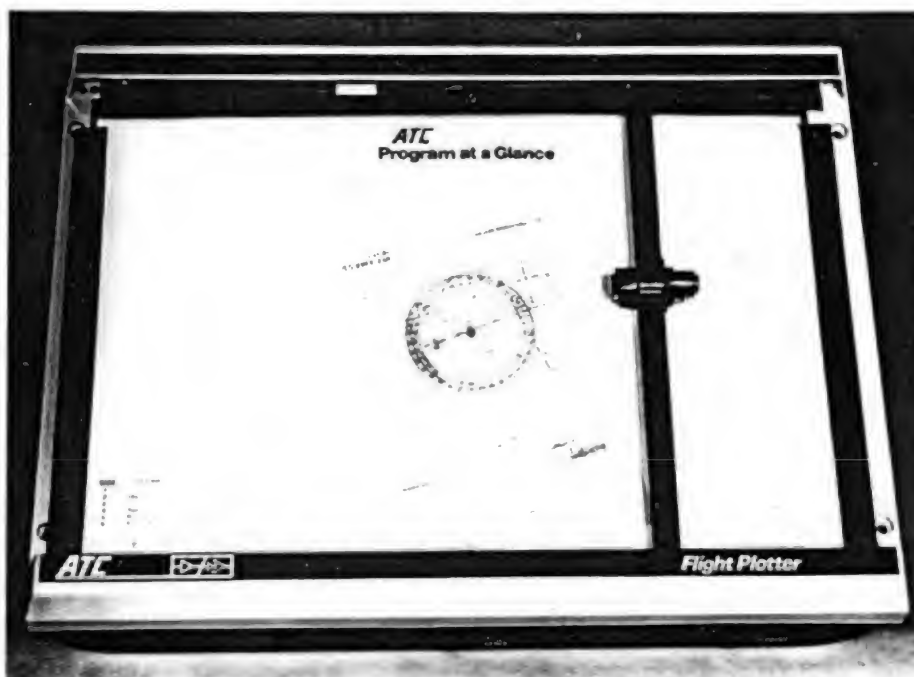
Use of this ATC-810 option gives pilots greater flexibility than the standard two-scale capability of the 810 because it allows them to use all existing enroute charts, approach plates, or they can create their own.

This enhancement option enables the operator to dial into the transponder any desired scale from 3 to 15 nautical miles per inch and any tenth of a mile in between. It allows the instructor to:

- Use any area charts and plot the execution of an entry into a holding pattern, and the holding pattern itself, after which he can call for an ILS approach from the holding pattern.
- Closely monitor the pilot's slightest deviation from the localizer on his ILS approach, using the exact scale of the approach plate.
- Use published flight charts or instrument approach plates, regardless of scale.
- See the actual flight path of students and track navigational errors as small as one degree.

Charts from the plotter can be used as visible pilot performance for the instructor's file.

The Variable Scale Flight Plotter Enhancement option is retrofittable to any existing ATC-810. Operators under FAR Parts 61, 141 and 135 can have their ATC-810's currently being used with X-Y plotters retrofitted with the new variable scale enhancement *without purchasing a new plotter.*



# ATC® Option Bulletin # 4

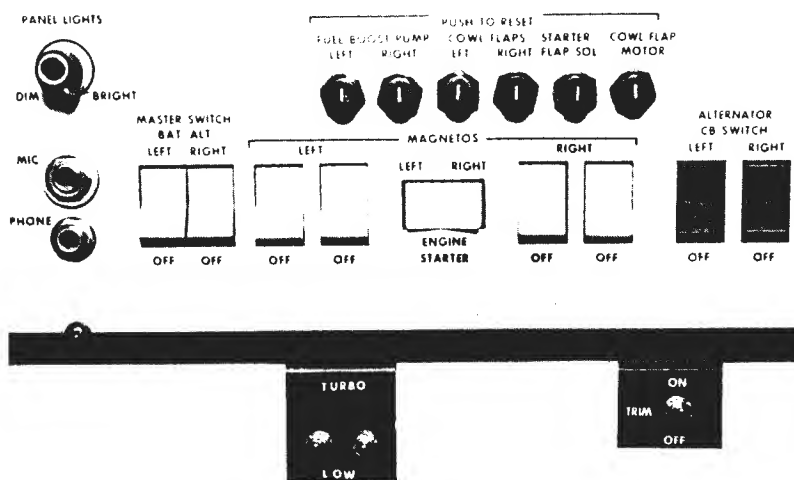
## Performance Option

This option enables an ATC-810 user to select the performance characteristics of a turbocharged or non-turbocharged aircraft in the twin engine weight class ranging from 3900-8000 lbs. Available only with the Light Twin Control Force/Electric Trim option, this feature adds a turbo/non-turbo switch panel to the 810. The left switch on the panel controls the rudder pedal pressure and the right switch controls the manifold pressure indication to simulate either a turbocharged or non-turbocharged engine. The user can select the desired aircraft performance by setting a) red lines located on the manifold pressure gauge and RPM gauge, and/or b) a red line for Vmc and a blue line for Vyse on the airspeed indicator. With this option, RPM limits are controllable from the Instructor Fault Console using the prop RPM controls. Airspeed relationship to power settings is also controlled from the Instructor Fault Console.

Electric elevator trim control allows the pilot to trim out back pressure on the yoke when changing pitch attitude, and it frees up the pilot's left hand during critical flight phases such as takeoffs and landings.

Potential users include commuter airline training departments, flight schools and colleges teaching primary, multi-engine and ab initio students, and airmanship courses that concentrate on recurrent multi-engine training, using a variety of twin engine aircraft.

This factory-installed enhancement results in a more realistic training experience with the ATC-810.





ATC-810  
PRICE LIST/ORDER FORM  
Effective Date: August 1, 1982

Description	ORDER		
	List Price	Qty.	Total Price
ATC-810 Twin Engine CPT/IFR Flight Simulator with Cockpit Enclosure, Instructor Fault Panel, Four Tank Fuel Management System, Pilot Seat and Jump Seat, Two Headsets and Owner's Kit.	\$35,950.00		

#### OPTIONS

Horizontal Situation Indicator (HSI) Factory Installed Option that provides continually slaved Gyro Magnetic Heading, VOR, LOC, and GS information in a single display.	\$ 3,190.00		
VOR/ILS Meter (replaces VOR indicator on HSI equipped simulators)	\$ 955.00		
QFE Settable Altimeter (provides QFE/QNH capability)	\$ 995.00		
X-Y Flight Plotter	\$ 2,550.00		
Special Area PROM — Original Factory programmed, customer designated, Navigational Area.	\$ 2,974.00		
Special Area PROM — Duplicate of original.	\$ 520.00		
ATC-810 Owners Manual	\$ 65.00		
ATC-810 Low Altitude Enroute Charts (N.Y. Area - 50 per pack)	\$ 25.00		
ATC-810 Normal/Emergency Checklist (Extra copies)	\$ 25.00		
ATC-810 Approach Chart Book (N.Y. Area - Extra copies)	\$ 35.00		
220V 50Hz Conversion	\$ 210.00		

#### SERVICE POLICY

ATC-810 One-Year Service Policy. Available only with new unit or for renewal on any 810 simulator continuously covered without lapse.	\$ 1,175.00		
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Name \_\_\_\_\_

Subtotal \_\_\_\_\_

Address \_\_\_\_\_ (FOB West Long Branch, N.J.) Sales Tax \_\_\_\_\_

Signature \_\_\_\_\_ Shipping \_\_\_\_\_

Ship to: (We cannot ship to a P.O. Box) Total \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Method of Shipping ☐ Surface ☐ Air

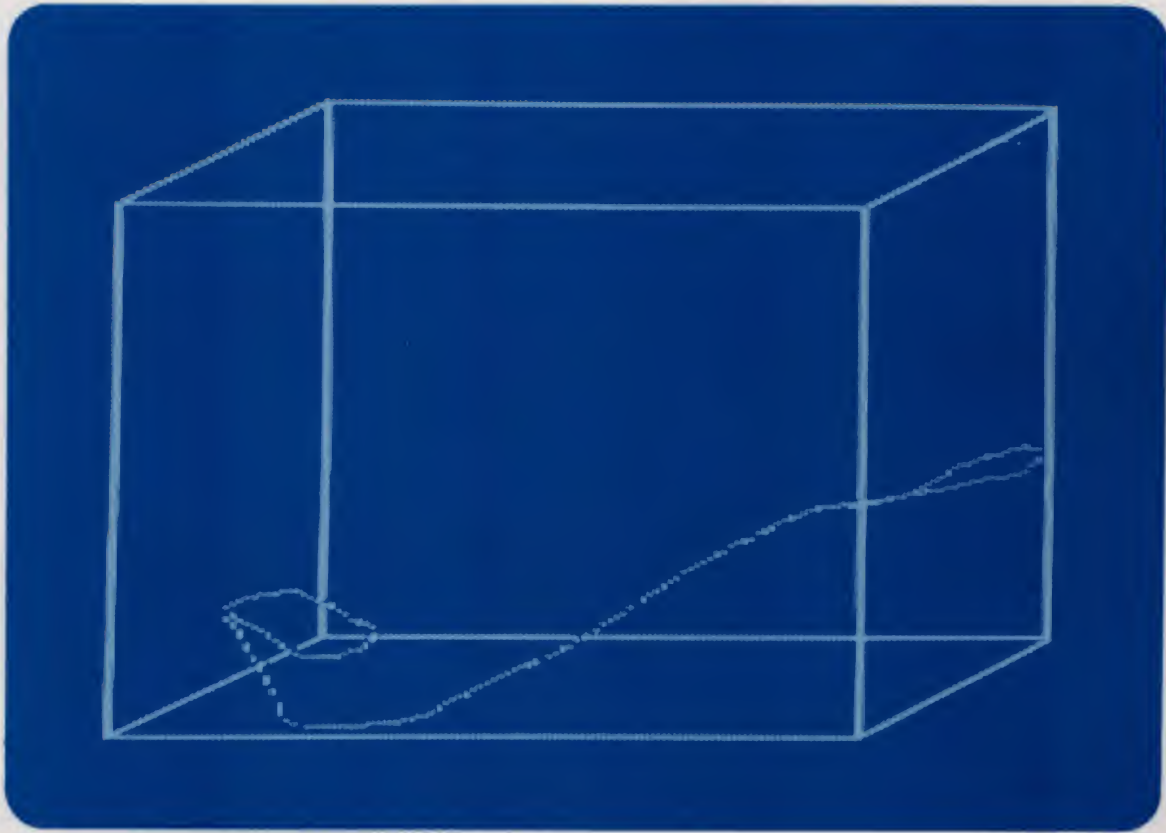
☐ Other (attach Shipping Instructions)

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE



ATC West, Inc., James G. Neighbor, President  
10405 W. 52nd Terrace, Shawnee, Kansas 66203  
913-268-9051





**ATC<sup>®</sup> OPES<sup>™</sup>**

**Flight Simulator / Computer System Interface**

The ATC<sup>®</sup> OPES<sup>™</sup> (Objective Pilot Evaluation System) is a computer interface system for use with any currently available personal computer. Capable of monitoring and permanently recording any of 30 different pilot operations, the ATC<sup>®</sup> OPES<sup>™</sup> represents state of the art in flight instruction/training equipment.

ATC<sup>®</sup> OPES<sup>™</sup> provides not only traditional flight recording in the horizontal plane (x-y) but also provides tracking in the vertical plane (z) (See Figure 1). This feature will enable the instructor to monitor the students altitude holding ability, during the entire flight from takeoff to completion of landing. A hard copy print out is also available to provide a permanent record of the flight.

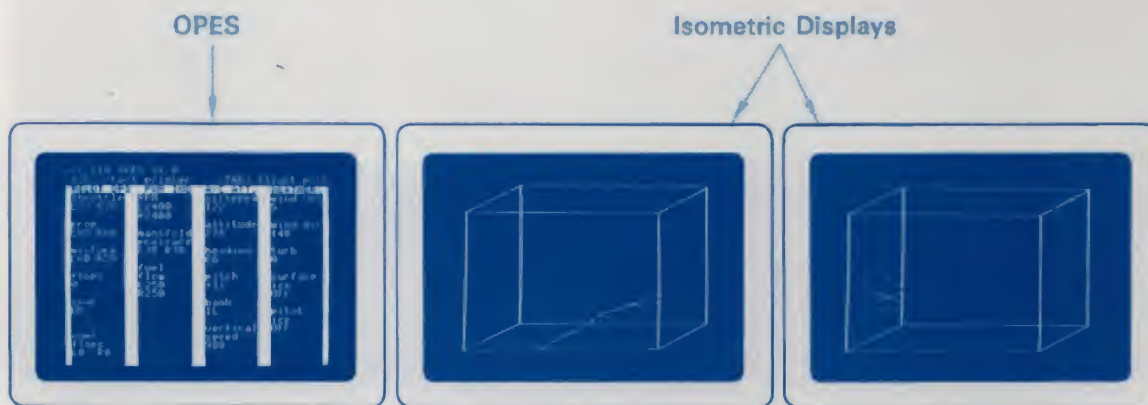


Figure 1

Every pilot operation, as well as every flight parameter, is displayed at the instructors station. From brake release and full power at takeoff to completion of landing the instructor will be provided with a real time readout and subsequent hard copy printout of the students actions. For instance: During takeoff; at what speed did the student rotate, and to what pitch attitude did he rotate, when did he retract the gear, what power settings did he use for climb, did he lean appropriately and at the correct time...

Every pilot operation, as well as the entire aircraft performance, are available for the instructor, either on the monitor or printer.

ATC<sup>®</sup> OPES<sup>™</sup> provides a truly objective presentation of the student's flight performance for effective post flight debriefing.

The ATC<sup>®</sup> OPES<sup>™</sup> was designed with the flight instructor in mind. No special computer language is necessary to talk to the computer. Each operation desired is presented on the monitor in a menu format and tells the operator what key(s) to press to attain the desired result. This simplistic design approach helps keep the flight instructor free to attend to his more important responsibility...flight instructing.



ATC OPES V1.0 PAGE 1																											
AIRCRAFT ATTITUDE										POWER INDICATION						PILOT OPERATIONS						WEATHER					
TIME	ALT	HDG	A/S	VSI	BANK		PITCH	RPM			F.F.		PILOT OPERATIONS						ICING		WIND						
					ANGLE	PITCH		L	N	L	R	L	R	L	R	FLAPS	GEAR	L	R	L	R	L	R	TURB	SURF	PITOT	VEL
0:12	126	44	0	0	0	+0	11	11	600	600	30	30	0	DOWN	15	17	99	99	99	99	99	0	0	0	0	05	140
0:18	126	66	41	0	0	+0	43	44	2500	2500	250	250	0	DOWN	99	99	99	99	99	99	99	0	0	0	0	05	140
0:24	124	66	89	0	0	+4	44	44	2500	2500	250	250	0	DOWN	99	99	99	99	99	99	99	0	0	0	0	05	140
0:31	145	66	109	950	2R	+9	43	44	2500	2500	250	250	0	DOWN	99	99	99	99	99	99	99	0	0	0	0	05	140
0:38	207	67	114	910	1R	+9	43	43	2500	2500	250	250	0	UP	99	99	99	99	99	99	99	0	0	0	0	05	140
0:43	260	66	121	940	1L	+9	38	38	2450	2400	180	180	0	UP	82	76	85	85	60	58	0	0	0	0	05	140	
0:48	300	82	126	850	17R	+7	39	38	2400	2400	180	180	0	UP	77	76	85	86	60	58	0	0	0	0	05	140	
0:55	385	76	124	850	16R	+7	39	38	2400	2400	180	180	0	UP	77	76	85	85	60	59	0	0	0	0	05	140	
1:01	471	110	121	910	1R	+8	38	38	2400	2400	180	180	0	UP	77	76	85	86	60	58	0	0	0	0	05	140	
1:07	565	110	120	950	0	+9	38	38	2400	2400	180	180	0	UP	77	76	85	86	60	58	0	0	0	0	05	140	
1:13	666	111	116	970	0	+9	38	38	2400	2400	180	180	0	UP	77	76	85	86	60	58	0	0	0	0	05	140	
1:19	761	110	112	980	0	+10	38	38	2400	2400	180	180	0	UP	77	76	85	86	60	59	0	0	0	0	05	140	
1:24	848	109	119	970	2L	+9	38	38	2400	2400	180	180	0	UP	77	76	85	86	60	59	0	0	0	0	05	140	

Figure 2  
Reduced copy of actual OPES printout

ATC® OPES™ provides real time monitoring and hard copy printout (See Figure 2) of the following pilot operations and flight parameters:

#### PILOT OPERATIONS

Throttle Lever Position  
Prop Lever Position  
Mixture Lever Position  
Flap Position (degrees)  
Cowl Flap Position  
Landing Gear Position

#### AIRCRAFT ATTITUDE

Heading  
Altitude  
Airspeed  
VSI  
Bank Angle  
Pitch Attitude

Also:

Manifold Pressure (L&R in PSI)  
RPM (L&R)  
Fuel Flow (L&R in LBS/hr)

#### WEATHER FACTORS

Wind Direction  
Wind Velocity  
Turbulence  
Wing Icing  
Pilot Icing

The ATC® OPES™ is directly compatible with any Apple II, Apple II+, Apple IIc, or Franklin 1000 and 12000 computers. For use with IBM, or Digital personal computers, the ATC® OPES™ will need a software change and ATC will therefore require a slightly increased lead time to ship OPES™ after receipt of customer order.

The ATC® OPES™ can be purchased either by itself (simulator/computer interface and operating instructions) or ATC® can provide a complete personal computer system compatible with OPES™. Call today to discuss how the ATC® OPES™ can expand the capabilities of your flight department through state-of-art technology.



Figure 3  
Typical ATC® OPES™ Installation

**ATC®** Flight Simulator Co.



1650 19th Street  
Santa Monica, CA

(213) 453-3557  
Telex 284687 ATC